

**REMARKS**

In response to the Office Action mailed May 25, 2011, Applicants respectfully request reconsideration. Claims 1, 3-8, 10-11, and 13-30 are pending in the application. Claims 1, 14, 22 and 30 have been amended in the claim listing above. Support for these new claims can be found in the specification, for example, at page 17, lines 13-24. The application is believed to be in condition for allowance.

**Rejections Under 35 U.S.C. § 103**

Claims 1, 3-8, 10-11 and 13-30 were rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,128,279 to O'Neil *et al.* (hereinafter, "O'Neil") in view of US Patent Pub. No. 2003/0120723 by Bright *et al.* (hereinafter, "Bright").

For context and without limitation of the claims, the present invention relates to providing an efficient partitioned resource server. In one embodiment, the partitioned resource server comprises a plurality of individual servers. In addition, embodiments of the present invention redistribute client load among a plurality of individual servers. For instance, a load monitor process may determine that one of the plurality of individual servers is overly burdened or asset constrained. This determination may result from an analysis that one of the individual servers is overly utilized given the assets the server has available. In addition, the load monitor process may determine that the server, although performing and responding to client requests an acceptable level, is overly burdened with respect to client load (or bandwidth) being carried by other servers, that is, it considers the overall system load as well as individual loads. Accordingly, the client distribution process may make a determination that overall efficiency may be improved by redistributing client load from one server to the other servers.

The Office Action, at page 4, asserts that O'Neil discloses "*a client connection distribution process ... capable of repartitioning a set of connections for distributing client load,*" as recited by Claim 1, as previously presented. Applicants respectfully disagree. However, in an effort to expedite prosecution, Applicants have amended claim 1 to recite in pertinent part: "*a client connection distribution process ... capable of repartitioning a set of connections for distributing client load ... based on a measurement of overall system efficiency*

*determined from the measurement of overall system load and the client load on each of the plurality of storage servers.”*

In contrast, O'Neil relates to a system which distributes requests among a plurality of network servers. Further, O'Neil discloses that requests are received from a remote source at a first one of the network servers. O'Neil then determines whether to process the request at the first network server. A load balancing technique disclosed by O'Neil may make such a determination.

For example, O'Neil referring to Figs. 2A- 2B, discloses that a network request is received at one of a plurality of servers. Subsequently, O'Neil determines a load currently being processed by the receiving server. O'Neill then determines whether the load of the receiving server is greater than a first predetermined value. If the load at the receiving server is greater than the first predetermined value, O'Neil then redistributes the request to a different server based on a measurement of load currently being processed at the other servers of the plurality of servers.

In other words, O'Neil only performs load-balancing if a receiving server is considered overly burdened based on a measurement of the current load of the receiving server. O'Neil fails to disclose performing load-balancing based on the overall efficiency of the plurality of servers. For instance, O'Neil never performs load-balancing if the load of a receiving server has not reached a first predetermined value. In contrast, Applicants perform load-balancing “*based on a measurement of overall system efficiency determined from the measurement of overall system load and the client load on each of the plurality of storage servers,*” as recited by Claim 1, as amended. In other words, Applicants, as stated above, perform load-balancing if overall system efficiency may be improved by redistributing client load from one server to the other servers regardless of the load at the receiving server.

Further, the Office Action, at page 4, acknowledges that O'Neil fails to disclose a volume partitioned across a plurality of servers and a portion of a given resource. However, the Office Action asserts that Bright discloses said limitation. Even if Bright discloses said limitation, which Applicants do not concede, Bright fails to cure the deficiencies of O'Neil as described above.

Accordingly, Applicants respectfully submit that Claim 1, as amended, overcomes the rejection.

Independent claims 14, 22, and 30 have been amended to include similar elements as Claim 1. Therefore, Applicants respectfully submit that claims 14, 22 and 30 overcome the rejection under 35 U.S.C. § 103(a) for the reasons presented above.

Because claims 3-8, 10-11, and 13 depend from independent claim 1; claims 14-21 depend from independent claim 14; and claims 23-29 depends from independent claim 22, Applicants respectfully submits that these dependent claims should be allowable for at least the same reasons presented above.

### **CONCLUSION**

In view of the above amendments and remarks, it is believed that all claims are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned.

Respectfully submitted,  
HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By /David J Thibodeau Jr Reg No 31671/  
David J. Thibodeau, Jr.  
Registration No. 31,671  
Telephone: (978) 341-0036  
Facsimile: (978) 341-0136

Concord, MA 01742-9133  
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